

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions of the claims in this application. Changes to the claims are indicated by strikethrough for deleted matter and underlining for added matter.

Listing of Claims

14. (Currently Amended) A catheter for delivering a biologically active material to a desired location of a body lumen of a patient comprising an expandable portion which is insertable or implantable into a body lumen, wherein the expandable portion is expandable in response to inflation pressure to fill the cross-section of the lumen and engage the tissue of the lumen and wherein the expandable portion comprises:

a) a balloon;

b) a reservoir disposed about the balloon, wherein the reservoir is defined by a membrane having a plurality of pores therein, ~~and wherein the reservoir~~ is capable of containing the biologically active material and wherein the reservoir is connected to a reservoir lumen for filling the reservoir with the biologically active material; and

c) a biostable sponge coating for the release of at least one biologically active material disposed about the membrane, wherein the sponge coating comprises a non-hydrogel polymer having a plurality of voids and wherein the sponge coating is in fluid communication with the reservoir.

15. (Original) The catheter of claim 14 wherein the voids are formed by eluting a particulate material from the polymer.

16. (Previously presented) The catheter of claim 14, wherein the void space of the sponge coating is greater than about 60% of the volume of the sponge coating.

17. (Currently Amended) The catheter of claim 14 wherein the infusion mechanism comprises an inflation lumen connected to a balloon disposed ~~wherein~~ within the reservoir.

18. (Original) The catheter of claim 14 wherein the expandable portion further comprises a perfusion lumen for sustained infusion of the biologically active material into the voids and inflation of the expandable portion.

19. (Currently Amended) The catheter of claim 14 which further comprises a control-mechanism for synchronizing the deflation of the expandable portion and the infusion of the biologically active material into the voids.

20. (Original) The catheter of claim 14 wherein the polymer comprises an elastomer.

21. (Previously Presented) The catheter of claim 20 wherein the elastomer comprises a silicone, polyurethane, thermoplastic elastomer, ethylene vinyl acetate copolymer, polyolefin elastomer, or EPDM rubber.

22. (Previously Presented) The catheter of claim 14 wherein the biologically active material is heparin, paclitaxel, or rapamycin.

23. - 47. (Canceled)